AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph beginning on page 9, line 18 of the specification with the following amended paragraph to insert the symbol "Σ":

Here, $P_{skin}(x,y,n)$ denotes the probability that when the size of a face is n, pixel (x,y) is a face skin color, Hue(i,j) and Sat(i,j) denote the hue and saturation at coordinates (i,j), respectively, and $\vec{u}$ and Σ denote the average and distribution of Gaussian dispersion of the skin color model, respectively.

Please replace the paragraph beginning on page 10, line 23 of the specification with the following amended paragraph to insert the symbol "Σ":

Here, n denotes the size of a face area to be detected, (x,y) denotes the coordinates of the image, i denotes the number of the highest points, $\vec{u}_i$ denotes the central coordinates of a candidate area where a face is located, and Σ denotes a dispersion matrix. These are expressed by the following equations 4 and 5:

Please replace the paragraph beginning on page 13, line 5 of the specification with the following amended paragraph:

However, since it is difficult to track a fast-moving object with a fixed Gaussian kernel g( ), the dispersion of the kernel needs to be adjusted with respect to the speed of the moving object. A Gaussian kernel, in which ~~considering this~~ the size of a motion vector is measured and the dispersion is modified so as to be in proportion to the motion vector, is shown in FIG. 5(b).